IN THE CLAIMS

1.   (currently amended) A method for managing locomotives in a railyard including a parking yard and a service yard, based on possible future states of the parking yard and the service yard, using a system including a computer, said method comprising the steps of:

establishing an initial state of the locomotives in the parking yard and the service yard;

enumerating possible present locomotive placement options;

enumerating possible future railyard states arising from each possible present locomotive placement option;

examining each possible future railyard state; and

choosing a present option based on the examination of the possible future railyard states.

2.   (original) A method in accordance with Claim 1 wherein said step of enumerating possible present locomotive placement options comprises the steps of:

evaluating a geometry of the parking yard; and

evaluating a geometry of the service yard.

3.   (canceled)

4.   (currently amended) A method in accordance with Claim 3 1 wherein said step of establishing an initial railyard state of the locomotives in the parking yard and the service yard comprises the steps of:

evaluating a present locomotive configuration of the parking yard; and

evaluating a present locomotive configuration of the service yard.

5.   (currently amended) A method in accordance with Claim 3 1 wherein said step of enumerating possible future railyard states comprises the steps of:

evaluating the initial railyard state; and

evaluating a yard schedule.

6.   (original) A method in accordance with Claim 5 wherein said step of evaluating a yard schedule comprises the steps of:

evaluating an inbound locomotive schedule; and

evaluating an outbound locomotive schedule.

7.   (original) A method in accordance with Claim 6 wherein said step of evaluating a yard schedule further comprises the steps of:

evaluating service requirements of inbound locomotives;

evaluating a list of locomotive service types provided in the service yard; and

evaluating non-standard movements of locomotives within the railyard.

8.   (original) A method in accordance with Claim 1 wherein said step of examining each possible future railyard state comprises the steps of:

examining a cost of each possible future state; and

examining a time based efficiency of each possible state.

9.   (original) A method in accordance with Claim 8 wherein said step of examining a cost of each possible future state comprises the steps of:

examining costs incurred from delays to the outbound locomotive schedule caused by the service requirements;

examining costs incurred in performing non-standard movements;

examining costs incurred by schedule delays caused by non-standard movements; and

examining costs incurred by late departure of a locomotive.

10.   (original) A method in accordance with Claim 8 wherein said step of examining a time based efficiency of each possible state comprises the steps of:

examining delays to an outbound locomotive schedule caused by the service requirements; and

examining delays caused by non-standard movements.

11.   (original) A method in accordance with Claim 1 wherein said step of choosing a present option comprises the step of executing a locomotive management algorithm utilizing the computer.

12.   (original) A method in accordance with Claim 11 wherein said step of executing a locomotive management algorithm comprises the steps of:

applying a set of yard management objectives;

applying a set of parking yard management rules; and

applying a set of service yard management rules.

13.   (original) A method in accordance with Claim 12 wherein said step of applying a set of yard management objectives comprises the steps of:

assembling an outbound locomotive consist as scheduled;

delivering an outbound locomotive consist as scheduled;

reducing a total labor usage figure for labor involved in assembling and delivering an outbound locomotive consist;

reducing delays in locomotive servicing; and

comparing the cost of late locomotive consist departure to additional labor costs needed to assemble and deliver an outbound locomotive consist as scheduled.

14.   (original) A method in accordance with Claim 12 wherein said step of applying a set of parking yard management rules comprises the steps of:

executing locomotive pull-forwards when there is a reduced number of locomotives on an affected parking track;

maintaining an order of locomotives on each parking track such that locomotives for later outbound locomotive consists are parked behind locomotives for earlier outbound locomotive consists; and

parking a lead locomotive for an outbound locomotive consist on a parking track such that the lead locomotive is in front of other locomotives parked on the same track that are allocated for the same outbound locomotive consist.

15.   (original) A method in accordance with Claim 12 wherein said step of applying a set of service yard management rules comprises the steps of:

positioning a locomotive in a queue for service on a lead-in track to a service bay that provides the appropriate service;

positioning locomotives in a queue on a lead-in track in an order that allows servicing of each locomotive to be completed before each locomotive is scheduled for assembly in an outbound locomotive consist; and

scheduling short service activities before long service activities when scheduling conflicts are not at issue.

16.   (currently amended) A networked system for managing locomotives in a railyard including a parking yard and a service yard, based on possible future states of the parking yard and the service yard, said system comprising:

a client system comprising a browser;

a database for storing information;

a server system coupled to said client system and said database, said server system configured to:

establish an initial state of the locomotives in the parking yard and the service yard;

enumerate possible present locomotive placement options;

enumerate possible future railyard states arising from each possible present locomotive placement option;

examine each possible future railyard state; and

determine a present option based on the examination of the possible future railyard states.

17.   (original) A networked system in accordance with Claim 16 wherein to enumerate possible present locomotive placement options said server system further configured to:

evaluate a geometry of the parking yard; and

evaluate a geometry of the service yard.

18.   (canceled)

19.   (currently amended) A networked system in accordance with Claim ~~18~~ 17 wherein to establish an initial ~~railyard~~ state of the locomotives in the parking yard and the service yard said server system further configured to:

evaluate a present locomotive configuration of the parking yard; and

evaluate a present locomotive configuration of the service yard.

20.   (currently amended) A networked system in accordance with Claim ~~18~~ 17 wherein to enumerate possible future railyard states said server system further configured to:

evaluate the initial railyard state; and

evaluate a yard schedule.

21.   (original) A networked system in accordance with Claim 20 wherein to evaluate a yard schedule said server system further configured to:

evaluate an inbound locomotive schedule; and

evaluate an outbound locomotive schedule.

22.   (original) A networked system in accordance with Claim 21 wherein to evaluate a yard schedule said server system further configured to:

evaluate service requirements of inbound locomotives;

evaluate a list of locomotive service types provided in the service yard; and

evaluate non-standard movements of locomotive within the railyard.

23.   (original) A networked system in accordance with Claim 16 wherein to examine each possible future railyard state said server system further configured to:

examine a cost of each possible future state; and

examine a time based efficiency of each possible state.

24.   (original) A networked system in accordance with Claim 23 wherein to examine a cost of each possible future state said server system further configured to:

examine a cost of delays to the outbound locomotive schedule caused by the service requirements; and

examine a cost of non-standard movements.

25.   (original) A networked system in accordance with Claim 23 wherein to examine a time based efficiency of each possible state said server system further configured to:

examine costs incurred from delays to the outbound locomotive schedule caused by the service requirements;

examine costs incurred in performing non-standard movements;

examine costs incurred by schedule delays caused by non-standard movements; and

examine costs incurred by late departure of a locomotive.

26.   (original) A networked system in accordance with Claim 16 further configured to execute a locomotive management algorithm by:

applying a set of yard management objectives;

applying a set of parking yard management rules; and

applying a set of service yard management rules.

27.   (original) A networked system in accordance with Claim 26 wherein to apply a set of yard management objectives said server system further configured to:

assemble an outbound locomotive consist as scheduled;

deliver an outbound locomotive consist as scheduled;

reduce a total labor usage figure for labor involved in assembling and delivering a locomotive consist;

reduce delays in locomotive servicing; and

compare the cost of late locomotive consist departure to additional labor costs needed to assemble and deliver an outbound locomotive consist as scheduled.

28.   (original) A networked system in accordance with Claim 26 wherein to apply a set of parking yard management rules said server system further configured to:

execute locomotives pull-forwards when there is a reduced number of locomotives on an affected parking track;

maintain an order of locomotives on each parking track such that locomotives for later outbound locomotive consists are parked behind locomotives for earlier outbound locomotive consists; and

park a lead locomotive for an outbound locomotive consist on a parking track such that the lead locomotive is in front of other locomotives parked on the same track that are allocated for the same outbound locomotive consist.

29.   (original) A networked system in accordance with Claim 26 wherein to apply a set of service yard management rules said server system further configured to:

position a locomotive in a queue for service on a lead-in track to a service bay that provides the appropriate service;

position locomotives in a queue on a lead-in track in an order that allows servicing of each locomotive to be completed before each locomotive is scheduled for assembly in an outbound locomotive consist; and

schedule short service activities before long service activities when scheduling conflicts are not at issue.

30. (currently amended) A networked system according to Claim 16 wherein the client system and the server system are connected via a networked and wherein the network is one of a wide area network, a local area network, and an Intranet and the ~~Internet~~ Internet.

31. (original) A networked system according to Claim 16 wherein said server system is further configured with a displaying component for displaying various user interfaces to the user, a receiving component for receiving an inquiry to provide information from one of a plurality of users, a collection component for collecting information from users into the centralized database, a tracking component for tracking information on an on-going basis, and an accessing component for accessing the centralized database and causing the retrieved information to be displayed on the client system.

32. (original) A networked system according to Claim 31 wherein said server system further configured with a processing component for searching and processing received inquiries against the data storage device containing a variety of information collected by the collection component.

33. (original) A networked system according to Claim 31 wherein said server system further configured with a retrieving component to retrieve information from the data storage device.